

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-27 (canceled)

Claim 28. (currently amended) A mixing dome for use in a thermostatic control valve assembly having a hot fluid inlet, a cold fluid inlet, a thermostatically controlled flow control valve combining the hot and cold fluid and a thermostat operably coupled to control the flow control valve in response to the temperature of the fluid mixture, the mixing dome comprising:

 a housing having an inner wall defining a mixing chamber in fluid communication with the hot and cold fluid inlets and the thermostat; and

 at least one baffle affixed to said inner wall of said housing, said baffle including;

 a leading upstream surface portion edge tapered toward said housing;

 a trailing downstream surface portion edge wider than said upstream surface portion edge; and

 an arcuate edge portion connecting said upstream and downstream surface portions edges.

Claim 29. (currently amended) The mixing dome of claim 28 wherein said baffle runs about 210 degrees from said tapered upstream surface portion ~~downstream end~~ to said trailing downstream surface portion upstream edge.

Claim 30. (previously presented) The mixing dome of claim 28 wherein said baffle has a surface area that is about one-half the cross sectional area of the housing.

Claim 31. (previously presented) The mixing dome of claim 28 wherein said baffle has a paisley shape.

Claim 32. (previously presented) The mixing dome of claim 28, wherein said at least one baffle includes two baffles sequentially arranged and angularly displaced along a length of said housing.

Claim 33. (previously presented) The mixing dome of claim 32, wherein said two baffles are angularly displaced by an angle of about 120 degrees.

Claim 34. (currently amended) The mixing dome of claim 32, wherein said at least one baffle includes ~~at least~~ a third baffle sequentially arranged and angularly displaced from each of said two baffles along the length of said housing.

Claim 35. (new) A baffle for a mixing dome housing, said baffle comprising:
a leading upstream surface portion tapered toward the housing;
a trailing downstream surface portion wider than said upstream surface portion;
and
an arcuate edge portion connecting said upstream and downstream surface portions.

Claim 36. (new) The baffle of claim 35 wherein said baffle runs about 210 degrees from said leading upstream surface portion to said trailing downstream surface portion.

Claim 37. (new) The baffle of claim 35 wherein said baffle has a surface area that is about one-half the cross sectional area of the housing.

Claim 38. (new) The baffle of claim 35 wherein said baffle has a paisley shape.

Claim 39. (new) A baffle for a mixing dome housing, said baffle comprising:
an upstream portion;

a downstream portion;

an outer edge arcuately extending from the upstream portion to the downstream portion, the outer edge configured to be attached to the mixing dome housing; and

an inner edge arcuately extending from the upstream portion to the downstream portion, the inner edge on the side of the baffle opposite the outer edge, the baffle configured such that the distance between the inner edge and the outer edge at the upstream portion is a first distance and the distance between the inner edge and the outer edge at the downstream portion is a second distance, the second distance greater than the first distance.

Claim 40. (new) The baffle of claim 39, wherein said outer edge is configured such that when the baffle is attached to the mixing dome housing, the outer edge extends in an arc of about 210 degrees around the inner surface of the mixing dome.

Claim 41. (new) The baffle of claim 39, further comprising:

a first surface defined by the inner edge and the outer edge, the first surface having a surface area of about one-half of the cross-sectional area of the mixing dome housing.

Claim 42. (new) The baffle of claim 39, further comprising:

a first surface defined by the inner edge and the outer edge, wherein the first surface has a paisley shape when the baffle is attached to the mixing dome housing and the first surface is viewed from a point upstream of the upstream portion of the baffle.